

This listing of claims will replace all prior versions, and listings, of claims in the application:

The Status of the Claims

1. (Currently Amended) A method of distinguishing an audio-video signal originating from a local device from a broadcast signal, the method comprising:

classifying a video component of the audio-video signal by at least one of analyzing a histogram of pixel data, analyzing a quality factor, or attempting to detect embedded data in the video component;

classifying an audio component of the audio-video signal by at least one of attempting to detect embedded audio data or analyzing waveform energy associated with the audio component; and

determining ~~a source of whether~~ the audio-video signal originated from a local device or is a broadcast signal based on at least one of the video classification or the audio classification.
2. (Original) A method as defined in claim 1, wherein at least one of the video component and the audio component are digitized before being classified.
3. (Original) A method as defined in claim 1, wherein the histogram is calculated by dividing a portion of a video frame into a plurality of blocks.
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)

7. (Original) A method as defined in claim 1, wherein analyzing the histogram comprises at least one of: (a) comparing the histogram to a database of histograms, (b) determining a distribution of pixel data, (c) comparing the histogram values to a predetermined value, or (d) comparing the histogram to a histogram of a prior video frame.

8. (Original) A method as defined in claim 1, wherein the quality factor comprises a measurement of at least one of blur, blockiness, or jitter.

9. (Original) A method as defined in claim 1, wherein attempting to detect embedded data comprises analyzing a vertical blanking interval for embedded video data.

10. (Cancelled)

11. (Original) A method as defined in claim 1, wherein attempting to detect embedded audio data comprises analyzing the audio signal for an audio code.

12. (Original) A method as defined in claim 1, further comprising:
classifying the video component of the audio-video signal by at least one of
(a) examining image data of a predetermined portion of the video frame, or (b) comparing extracted text characters to a template.

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Currently Amended) ~~A method as defined in claim 1~~ A method of distinguishing an audio-video signal originating from a local device from a broadcast signal, the method comprising:

_____ classifying a video component of the audio-video signal by at least one of analyzing a histogram of pixel data, analyzing a quality factor, or attempting to detect embedded data in the video component;

_____ classifying an audio component of the audio-video signal by at least one of attempting to detect embedded audio data or analyzing waveform energy associated with the audio component; and

_____ determining a source of the audio-video signal based on at least one of the video classification or the audio classification, wherein determining the source of the audio-video component comprises combining values associated with the video classification with values associated with the audio classification.

17. (Cancelled)

18. (Currently Amended) ~~A method as defined in claim 1~~ A method of distinguishing an audio-video signal originating from a local device from a broadcast signal, the method comprising:

_____ classifying a video component of the audio-video signal by at least one of analyzing a histogram of pixel data, analyzing a quality factor, or attempting to detect embedded data in the video component;

_____ classifying an audio component of the audio-video signal by at least one of attempting to detect embedded audio data or analyzing waveform energy associated with the audio component; and

_____ determining a source of the audio-video signal based on at least one of the

video classification or the audio classification, wherein determining the source of the audio-video signal comprises:

applying weighting values to the video classification and the audio classification;

combining the weighted video classification and the weighted audio classification to create a combined result; and

comparing the combined result to a predetermined threshold.

19. (Currently Amended) An apparatus for distinguishing an audio-video signal originating from a local device from a broadcast signal, the apparatus comprising:

at least two of:

(a) an active video analyzer to classify a video component of the audio-video signal by at least one of analyzing a histogram of pixel data or analyzing a quality factor;

(b) a vertical blanking interval analyzer to classify the video component of the audio-video signal by attempting to detect embedded video data;

(c) a text extractor to at least one of detect text characters in the video component of the audio-video signal or extract text characters in the video component of the audio-video signal; and

(d) an audio analyzer to classify an audio component of the audio-video signal by at least one of detecting embedded audio data or analyzing an audio waveform's energy; and

a decision module to determine ~~a source of whether~~ the source of whether the audio-video signal originated from a local device or is a broadcast signal based on outputs of the at least two of

the active video analyzer, the vertical blanking interval analyzer, the text extractor, and the audio analyzer.

20. (Original) An apparatus as defined in claim 19, further comprising:
a digitizer configured to convert the audio-video signal into a digital representation; and
a frame buffer configured to store a digital video frame.
21. (Cancelled)
22. (Cancelled)
23. (Original) An apparatus as defined in claim 19, wherein the active video analyzer is configured to analyze the histogram by at least one of: (a) comparing the histogram to a database of histograms, (b) determining a distribution of pixel data, (c) comparing histogram values to a predetermined value, or (d) comparing the histogram to a histogram of a prior video frame.
24. (Original) An apparatus as defined in claim 19, wherein the active video analyzer is configured to determine the quality factor.
25. (Currently Amended) ~~An apparatus as defined in claim 19~~ An apparatus for distinguishing an audio-video signal originating from a local device from a broadcast signal, the apparatus comprising:
_____ at least two of:
_____ (a) an active video analyzer to classify a video component of the audio-video signal by at least one of analyzing a histogram of pixel data or analyzing a quality

factor;

_____ (b) a vertical blanking interval analyzer to classify the video
component of the audio-video signal by attempting to detect embedded video data;

_____ (c) a text extractor to at least one of detect text characters in the video
component of the audio-video signal or extract text characters in the video component of the
audio-video signal; and

_____ (d) an audio analyzer to classify an audio component of the audio-
video signal by at least one of detecting embedded audio data or analyzing an audio
waveform's energy; and

_____ a decision module to determine a source of the audio-video signal based on
outputs of the at least two of the active video analyzer, the vertical blanking interval analyzer,
the text extractor, and the audio analyzer, wherein the vertical blanking interval analyzer is
configured to detect at least one of closed captioning data, interactive television triggers, or
metering data.

26. (Original) An apparatus as defined in claim 19, wherein the active video
analyzer is configured to examine a portion of a video frame for a known image.

27. (Currently Amended) ~~An apparatus as defined in claim 19~~ An apparatus for
distinguishing an audio-video signal originating from a local device from a broadcast signal,
the apparatus comprising:

_____ at least two of:

_____ (a) an active video analyzer to classify a video component of the audio-
video signal by at least one of analyzing a histogram of pixel data or analyzing a quality

factor;

_____ (b) a vertical blanking interval analyzer to classify the video
component of the audio-video signal by attempting to detect embedded video data;

_____ (c) a text extractor to at least one of detect text characters in the video
component of the audio-video signal or extract text characters in the video component of the
audio-video signal; and

_____ (d) an audio analyzer to classify an audio component of the audio-
video signal by at least one of detecting embedded audio data or analyzing an audio
waveform's energy; and

_____ a decision module to determine a source of the audio-video signal based on
outputs of the at least two of the active video analyzer, the vertical blanking interval analyzer,
the text extractor, and the audio analyzer, wherein the text extractor is configured to compare
extracted text characters to known text characters.

28. (Currently Amended) ~~An apparatus as defined in claim 19~~ An apparatus for
distinguishing an audio-video signal originating from a local device from a broadcast signal,
the apparatus comprising:

_____ at least two of:

_____ (a) an active video analyzer to classify a video component of the audio-
video signal by at least one of analyzing a histogram of pixel data or analyzing a quality
factor;

_____ (b) a vertical blanking interval analyzer to classify the video
component of the audio-video signal by attempting to detect embedded video data;

_____ (c) a text extractor to at least one of detect text characters in the video

component of the audio-video signal or extract text characters in the video component of the audio-video signal; and

(d) an audio analyzer to classify an audio component of the audio-video signal by at least one of detecting embedded audio data or analyzing an audio waveform's energy; and

a decision module to determine a source of the audio-video signal based on outputs of the at least two of the active video analyzer, the vertical blanking interval analyzer, the text extractor, and the audio analyzer, wherein the decision module is configured to:

assign a weighting value to each received output;

combine the weighted output values to form a combined value; and

compare the combined value to a predetermined threshold to determine the source of the signal.

29. (Currently Amended) A machine readable medium storing instructions structured to cause a machine to:

classify a video component of the audio-video signal by at least one of analyzing a histogram of pixel data, analyzing a quality factor, or attempting to detect embedded data in the video component;

classify an audio component of the audio-video signal by at least one of attempting to detect embedded audio data or analyzing waveform energy associated with the audio component; and

determine ~~a source of whether~~ the audio-video signal originated from a local device or is a broadcast signal based on at least one of the video classification or the audio

classification.

30. (Original) A machine readable medium, as defined in claim 29, storing instructions structured to cause the machine to analyze the histogram by at least one of: (a) comparing the histogram to a database of histograms, (b) determining a distribution of pixel data, (c) comparing the histogram values to a predetermined value, or (d) comparing the histogram to a histogram of a prior video frame.

31. (Cancelled)